

## ANALYSIS OF THE FINANCIAL PERFORMANCE OF COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE (BEI) BEFORE AND DURING THE COVID-19 PANDEMIC

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### ABSTRACT

This research is a type of quantitative research with the aim of knowing the financial performance conditions of companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic. The samples used are companies listed on the Indonesian Stock Exchange for the 2019-2021 period and accessed via the official website of the Indonesian Stock Exchange at ([www.idx.co.id](http://www.idx.co.id)). The research sample was selected using techniquespurposive sampling and a total of 592 companies that met the criteria were obtained and 1,776 financial report data were observed during the 2019-2021 period. The data used in this research is secondary data, while the data collection technique uses documentation techniques. The analytical methods used are descriptive statistical tests, normality tests and difference testsWilcoxon Signed Rank Test. Data testing is carried out using statistical calculations through the applicationStatistical Product Service and Solution (SPSS). The research results showed that there were 3 variables that experienced significant differences between before and during the Covid-19 pandemic in companies listed on the Indonesia Stock Exchange. These differences occur in the variables of liquidity, profitability and activity in the form ofcurrent ratio (CR), return on assets (LONG),total assets turnover (TATTOO). Meanwhile, the solvency variable is measured usingdebt to equity ratio (DER) there is no significant difference between before and during the Covid-19 pandemic. **Keywords:** Financial Performance, Current Ratio, Return On Assets, Debt To Equity Ratio, Total Assets Turnover

### INTRODUCTION

The Corona virus or commonly known as Covid-19 is a virus that can cause problems with the respiratory system and even lung problems. The first case of this disease occurred in December 2019 in the city of Wuhan, China. On March 2 2020, President Joko Widodo officially announced that there were 2 citizens who were confirmed positive for Covid-19 in Indonesia. Since then, the Covid-19 infection has continued to spread and expand throughout Indonesia. The rapid spread of Covid-19 has prompted the government to take several preventive measures to minimize the impact of Covid-19 both from health and other socio-economic aspects. These prevention efforts include implementing social restrictions (*physical distancing*) and limiting community activities outside the home, such as teaching and learning activities carried out online and working from home, implementing and strengthening health protocols such as the use of masks and hand sanitizer. Not only that, the government has also created a program to procure and administer the Covid-19 vaccine in the hope of reducing transmission and reducing the death rate due to Covid-19, as well as improving the human immune system.

The Covid-19 pandemic has had a major impact on public health and the economy in Indonesia, because many companies have had to stop their business activities to minimize the spread of this virus (Rahmani, 2020). The Covid-19 pandemic has resulted in the performance of

stock exchange indices around the world from various sectors simultaneously experiencing a decline. In 2020 the Composite Stock Price Index (IHSG) decreased by 21.13% compared to the end of the previous year. The sector that experienced the biggest decline in 2020 was the property and real estate sector at -36.09%, while the consumer goods business sector showed relatively good performance (Santosa & Erna, 2021). At the same time, there are companies from various sectors that have to close their factories and temporarily stop their production activities in order to reduce their activities in purchasing capital goods and importing raw materials.

Not only that, several companies also laid off several of their employees due to a decrease in consumer demand during the pandemic. According to the Central Statistics Agency (BPS), during the Covid-19 pandemic, 32.66% of companies reduced working hours, this was in order to reduce operational costs amidst the decline in income due to the pandemic. Meanwhile, 17.06% laid off their employees without pay, 6.46% of companies laid off employees with partial payment of wages, while only 3.69% of employees were laid off with full wages. Not only that, 12.83% of employees were dismissed within a short time (CNN, 2020).

Seeing conditions like this, the Covid-19 pandemic has had an impact on company financial performance, especially company finances. Financial performance is a description of the company's financial health which will reflect its performance over a certain period of time through financial report analysis tools (Wanti and Sianturi, 2020). Financial performance measurement is used to obtain information regarding the flow of funds, use of funds, effectiveness, efficiency and to facilitate good decision making (Almaji, Alamro, and Al-Soub, 2012). Apart from that, financial performance can be used as a benchmark to find out whether before and during the Covid-19 pandemic the company had a positive or negative impact on the company's financial reports.

### **Signaling Theory (Signal Theory)**

*Signalling theory* (signal theory) was first put forward by Spence in 1973, who stated that signal theory provides a signal from the sender (owner of the information) who tries to provide information that is relevant and can be used by the recipient. According to Oktari et al (2016) *signalling theory* (signal theory) shows that companies will try to provide signals in the form of positive information to potential investors through disclosures in financial reports. Meanwhile, according to Suganda (2018: 15) signal theory is used to understand an action by management in conveying information to investors which can change investors' decisions after seeing the condition of the company.

Signal theory arises when there is information asymmetry between management and investors. According to Brigham and Houston (2006: 38) information asymmetry is a situation where management has information that is different from the information held by investors. The lack of information that outside parties have regarding the company means that they do not understand the real condition of the company well and tend to give a low value to the company's shares. The way to reduce information asymmetry is through signals given by management to outside parties, so that the company can increase its company value. Therefore, signal theory is needed to explain a company's financial reports to outside parties as a form of accountability for the company's financial performance (Suwarno and Ahmad, 2018).

### **Company Financial Performance**

According to Sawir (2005:1) financial performance is a condition that reflects the company's financial condition based on predetermined targets, standards and criteria. A similar opinion was expressed by Mulyadi (2007:2) who said that financial performance is a determination of the operational effectiveness of an organization and its employees based on targets, standards and criteria that have been determined periodically.

From several opinions regarding the meaning of financial performance above, it can be concluded that financial performance is the result of a company achieving success in various activities and activities that have been carried out in a certain period which can describe a healthy financial condition with indicators of capital adequacy, liquidity and profitability.

### **Financial Ratios**

Financial ratios are numbers obtained from the results of a comparison between one financial report post and another financial report post that has a relevant and significant relationship (Hery, 2018). According to Putri and Dharma (2016) financial ratios can be used as a benchmark in estimating the origin of funds that can be obtained as well as estimating the reaction of investors and creditors in determining which funds will be allocated. Apart from that, financial ratio analysis can help companies evaluate financial performance and is carried out periodically according to company policy. Munawir (2012) suggests four categories of ratios used to analyze financial performance, namely liquidity ratios, profitability ratios, solvency ratios and activity ratios.

### **Liquidity Ratio**

Liquidity ratios are ratios that can describe a company's ability to pay or fulfill short-term obligations that are due. The liquidity ratio is very important for a company because if the company fails to pay its short-term obligations it will cause a decrease in the company's value so that investor interest will also decrease and can result in bankruptcy. This is in line with the opinion of Nuriasari (2018) who says that liquidity ratios are important for companies because failure to pay short-term obligations can result in a company going bankrupt. There are several types of liquidity ratios, including the current ratio (*current ratio*), quick ratio (*quick ratio*), and cash ratio (*cash ratio*). In this research, the liquidity ratio that will be used is the current ratio or *current ratio* (CR). The current ratio is used to describe the comparison between current assets and current liabilities. This ratio is an indicator that is often used by analysts or economists to carry out balance sheet analysis.

H1 : There are differences in liquidity ratios before and during the Covid 19 pandemic which are measured using *current ratio* (CR).

### **Profitability Ratio**

Profitability ratios are ratios that describe a company's ability to generate profits through sales activities, use of capital or use of assets. There are several types of profitability ratios, among others *gross profit margin*, *net profit margin*, *return on equity*, *operating income ratio* and so forth. In this research, the profitability ratio that will be used is *return on assets* (ROA). ROA is used by companies to measure the rate of return on capital on all invested assets from the business that the company is running to obtain profits or profits. If ROA has a high value, the company's financial performance in generating profits can be said to be good.

H2: There are differences in profitability ratios before and during the Covid 19 pandemic which are measured using *return on assets* (LONG).

### **Solvency Ratio**

The solvency ratio is a ratio that can describe a company's ability to pay or fulfill all short-term and long-term obligations that are due. There are several types of solvency ratios, among others *debt to assets ratio*, *debt to equity ratio*, and so forth). In this research, the solvency ratio that will be used is *debt to equity ratio*. *Debt to equity ratio* (DER) is a comparison between liabilities and equity and is used to see the ability of the company's capital to fulfill all obligations, the position of this ratio can change for better or worse every month or year (Mohamad Samsul, 2015: 174). The higher the company's DER value, the higher the risk the company bears in paying its debts.

H3: There are differences in solvency ratios before and during the Covid 19 pandemic which are measured using *debt to equity ratio* (THE).

#### Activity Ratio

The activity ratio is a ratio used to measure a company's effectiveness in utilizing its resources. There are several types of activity ratios, among others *inventory turnover*, *fixed asset turnover*, *total asset turnover*, and so forth. In this research, the activity ratio used is *total asset turnover*. *Total asset turnover* It is very important for company management because it measures the company's ability to carry out daily activities and the company's efficiency in utilizing its assets.

H4 : There are differences in activity ratios before and during the Covid 19 pandemic which are measured using *total assets turnover* (THIS).

### RESEARCH METHOD

The approach and type of research used in this research is quantitative descriptive research. The data used in this research is data sourced from secondary data that has been processed and collected by organizations or other parties. Secondary data in this research uses financial report data for the 2019 - 2021 period from all companies listed on the Indonesia Stock Exchange (BEI). The financial report data was obtained through the official IDX website which can be accessed at <https://www.idx.co.id>.

The test used in this research is the test Wilcoxon signed test. Wilcoxon signed test is a test carried out to test the significance of the comparison of two samples that are related but not normally distributed (Sugiyono, 2017). Wilcoxon signed test used in this research aims to measure how big the difference is in the financial performance of companies listed on the Indonesia Stock Exchange (BEI) before and during the announcement of the Covid 19 pandemic case in Indonesia. Using the purposive sampling method, there were 592 companies during the 2019-2021 period that met the criteria to be used as samples in this research.

**Table 1**  
**Research Sample Selection Criteria**

No	Criteria	2019-2021
1	Companies listed on the Indonesia Stock Exchange (BEI) during the 2019-2021 period	829
2	The company does not present financial reports using Rupiah currency and does not have complete data or information	(93)
3	Companies that were delisted and suspended from the IDX during the 2019-2021 period	(29)
4	Companies that do not have a closed book year as of December 31 and do not release audited financial reports during the 2019-2021 period	(115)
	Number of companies that have sample criteria	592
	<b>Number of financial report data to be observed (592 x 3 years)</b>	<b>1.776</b>

#### Operational definition

The variable in this research is financial performance which consists of liquidity, profitability, solvency and activity. The variable measurements that will be used are described in the following explanation.

**Table 2**  
**Variable Measurement**

No	Variable	Measurement
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1	Liabilities	$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$
2	Profitability	$LENGTH = \frac{Net\ profit}{Total\ Assets} \times 100\%$
3	Solvency	$THE = \frac{Total\ Liabilities}{Total\ Equity}$
4	Activity	$THIS = \frac{Net\ Sales}{Total\ Assets}$

## RESULTS AND DISCUSSION

Companies listed on the Indonesian Stock Exchange are the population in this study, a total of 829 companies registered during the 2019-2021 period. However, those included in the sample criteria that have been determined are 592 companies that will be used in the research.

### Wilcoxon Signed Rank Test

Test the hypothesis in this research using Wilcoxon signed rank test which has decision making criteria when the Asymp.Sig value is less than 0.05 (<0.05) then the hypothesis or  $H_a$  is accepted. Conversely, when Asymp.Sig is more than 0.05 (>0.05) then the hypothesis or  $H_a$  is rejected.

**Table 5**  
**Statistic test Wilcoxon Signed Rank Test**  
**Test Statistics<sup>a</sup>**

	CR During – CR Before	ROA During – ROA Before	DER During – DER Before	TATTOOS During – TATTOOS Before
WITH	-1.982 <sup>b</sup>	-6.153 <sup>c</sup>	-0.249 <sup>c</sup>	-9.847 <sup>c</sup>
Asymp. Sig. (2- tailed)	0.047	0.000	0.803	0.000

**Table 6**  
**Ranks Wilcoxon Signed Rank Test**  
**Ranks**

		N	Mean Rank	Sum of Ranks
CR During - CR Before	Negative Ranks	285 <sup>a</sup>	278.02	4661.00
	Positive Ranks	306 <sup>b</sup>	312.75	95700.50
	Ties	1 <sup>c</sup>		
	Total	592		
ROA During - ROA Before	Negative Ranks	362 <sup>d</sup>	302.33	109442.00

	Positive Ranks	219 <sup>lt</sup> <sub>is</sub>	272.28	59629.00
	Ties	11 <sup>f</sup>		
	Total	592		
DER During - DER Before	Negative Ranks	304 <sup>g</sup>	285.28	86726.50
	Positive Ranks	288 <sup>h</sup>	308.34	88801.50
	Ties	0 <sup>i</sup>		
	Total	592		
TATTOO During - TATTOO Before	Negative Ranks	412 <sup>j</sup>	308.65	127163.50
	Positive Ranks	176 <sup>k</sup>	261.38	46002.50
	Ties	4 <sup>l</sup>		
	Total	592		

Based on test results *Wilcoxon signed rank test* on research variables before and during the Covid 19 pandemic in tables 5 and 6 as follows:

1. Difference current ratio (CR) before the pandemic and during the Covid 19 pandemic in companies listed on the IDX

Based on test results *Wilcoxon signed rank tests* shows the significance value current ratio (CR) of 0.047 is smaller than 0.05, which means H1 is accepted. So it can be concluded that there is a significant difference in the liquidity ratio in the form of current ratio (CR) before and during the covid-19 pandemic. These results are in line with research conducted on mining sector companies by Yolanda et al (2022) which shows that financial performance is measured using current ratio (CR) before and during the Covid-19 pandemic had a significant effect. The research results show that there are differences in company conditions during the Covid-19 pandemic. This is indicated by an increase in value current ratio (CR) which occurred in most companies on the Indonesian Stock Exchange (BEI) during the Covid-19 pandemic. This research is in line with signal theory that companies that have information related to the company will provide signals to stakeholders, especially potential investors. The results of this research provide a good signal to stakeholders, one of the impacts of the Covid-19 pandemic is to attract the interest of investors.

This increase in the liquidity ratio is because the company's liquidity is one of the determinants of the company's level of flexibility in obtaining capital, both from incoming investment funds and loans from banks as additional business capital. So these companies are trying to maintain sufficient funds even though they are in the midst of the onslaught of the Covid-19 pandemic. This is supported by the opinion of Kurniawan & Heri (2022) who state that by maintaining a good level of liquidity, the company's business processes will continue to run well and can be used as a consideration by investors to see the company's future in the short term.

2. Difference return on assets (ROA) before the pandemic and during the Covid 19 pandemic in companies listed on the IDX

Based on test results Wilcoxon signed rank tests shows the significance value return on assets (ROA) of 0.000 is smaller than 0.05, which means H<sub>2</sub> is accepted. So it can be concluded that there is a significant difference in the profitability ratio in the form of return on assets (ROA) before and during the Covid-19 pandemic. The results of this research are in line with Laili & Noerman (2022), Alviana & Megawati (2021), and Kustinah (2021) who found that during the Covid-19 pandemic the profitability ratios of companies in Indonesia had significant differences and decreased. The research results show that there are differences in company conditions during the Covid-19 pandemic. This is characterized by a decrease in value return on assets (ROA) which occurred in most companies on the Indonesia Stock Exchange (BEI) during the Covid-19 pandemic. So this research is in line with signal theory that companies that have information related to the company will provide signals to stakeholders, especially potential investors. The results of this research provide a bad signal to stakeholders that there has been a decline in profitability ratios during the Covid-19 pandemic which has had an impact on the return on assets and company activities.

ROA is a measurement of a company's effectiveness in managing existing assets to generate profits. Decline return on assets (ROA) shows that during the Covid-19 pandemic the company did not optimize the use of existing assets to generate profits so that the income received by the company decreased during the Covid-19 pandemic. This is supported by research by Rababah et al (2020) and Fitriyani (2021) which states that during the Covid-19 pandemic, restrictions on activities resulted in companies being less efficient in using total assets so that profitability and total investment in several economic sectors decreased.

### 3. Difference debt to equity ratio (DER) before the pandemic and during the Covid 19 pandemic in companies listed on the IDX

Based on test results Wilcoxon Signed Ranks Test shows the significance value debt to equity ratio (DER) of 0.803 is greater than 0.05, which means H<sub>3</sub> is rejected. So it can be concluded that there is no significant difference in the solvency ratio in the form of debt to equity ratio (DER) before and during the covid-19 pandemic. The results of this research are not in line with the signal theory that companies that have information related to the company will provide signals in the form of information related to the condition of the company to stakeholders. This information was not responded to and accepted by stakeholders, especially investors, because of its value debt to equity ratio (DER) of companies on the IDX before and during the Covid-19 pandemic did not experience significant differences. Thus, DER is not a concern for investors in assessing the company's financial performance.

Debt to equity ratio (DER) is a comparison between liabilities and equity which is used to see the ability of the company's capital to fulfill all obligations (Endri et al, 2020). The lower the DER value, the better the company's condition and conversely, the higher the company's DER value, the higher the risk the company bears in paying its debts. According to Hallan Ibrahim et al (2021) the decline in DER value occurs because the amount of debt owned is smaller than the amount of equity, so this has a good impact on the company because the company does not have a lot of debt to fund its business and a low DER value indicates that the company is in good condition. The test results show that the value debt to equity ratio (DER) experienced a decline during the Covid-19 pandemic, but there was no significant difference. This is because during the Covid-19 pandemic there were several companies that were able to pay off their obligations, but there were also those that experienced difficulties in paying off their obligations or were able to pay only a portion of their debts.

4. Difference total assets turnover (TATO) before the pandemic and during the Covid 19 pandemic in companies registered on the IDX.

Based on test results Wilcoxon signed rank tests shows the significance value total assets turnover (TATO) of 0.000 is smaller than 0.05, which means H<sub>4</sub> is accepted. So it can be concluded that there is a significant difference in the activity ratio in the form of total assets turnover (TATO) before and during the Covid-19 pandemic. The results of this research are in line with Febriantika et al (2021) and Ardi T & Nursiam (2022) who stated that during the Covid-19 pandemic there were significant differences in activity ratios. The research results show that there are differences in company conditions during the Covid-19 pandemic. This is characterized by a decrease in value total assets turnover (TATO) which occurred in most companies on the Indonesia Stock Exchange (BEI) during the Covid-19 pandemic. This research is in line with signal theory that companies that have information related to company activities will provide signals to stakeholders. The results of this research provide a bad signal that there was a decline in activity during the Covid-19 pandemic which had an impact on the company's income.

The decline that occurred proves that during the Covid-19 pandemic, there were government regulations for working from home or work from home (WFH) results in the company's ability to carry out production activities less effectively and efficiently. So that the company's sales during the Covid-19 pandemic were disrupted and decreased and the assets acquired did not increase too much. This is supported by research by Roro et al (2023) which states that during the Covid-19 pandemic total asset turnover decreased because many company assets were idle and did not contribute to company income.

## CONCLUSION

This research was conducted to determine the condition of the financial performance of companies listed on the Indonesia Stock Exchange before and during the Covid 19 pandemic. Hypothesis testing in this research was carried out using Wilcoxon Signed Rank Test. Based on test results from Wilcoxon signed rank test shows that there are significant differences in the liquidity, profitability and activity variables measured using current ratio (CR), return on assets (ROA) and total assets turnover (TATTOO). Meanwhile testing Wilcoxon signed rank test on the solvency variable which is measured using debt to equity ratio (DER) shows that there are no differences between before and during the Covid-19 pandemic. This is because during the Covid-19 pandemic there were several companies that were able to pay off their obligations, but there were also those that experienced difficulties in paying off their obligations or were able to pay only a portion of their debts

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